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| APPLICATION NO.                           | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---|-----------------|----------------------|-------------------------|------------------|--|
| 09/513,873                                | 02/28/2000      | Min Li               | HT99-024 9144           |                  |  |
| 28112 7                                   | 7590 03/24/2003 |                      |                         |                  |  |
| GEORGE O. SAILE & ASSOCIATES              |                 |                      | EXAMINER :              |                  |  |
| 28 DAVIS AVENUE<br>POUGHKEEPSIE, NY 12603 |                 |                      | CASTRO, ANGEL A         |                  |  |
|   |                 |                      | ART UNIT                | PAPER NUMBER     |  |
|   |                 |                      | 2653                    | 6                |  |
|   |                 |                      | DATE MAILED: 03/24/2003 |                  |  |
|   |                 |                      |                         |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

| •  | Application No.  |  | Applicant(s)  | Applicant(s)              |  |  |  |
|--|--|--|---|---------------------------|--|--|--|
|  |  |  | <b>\</b>  |                           |  |  |  |
| Notice of Allowability   | 09/513,873<br>Examiner   |  | LI ET AL.  Art Unit   | <del></del>               |  |  |  |
|  |  |  |   |                           |  |  |  |
| - <del>-</del>   | Angel A. Cas   | iro  | 2653  | <u></u>                   |  |  |  |
| The MAILING DATE of this communication apperation apperation allowable, PROSECUTION ON THE MERITS IS therewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI  | (OR REMAINS<br>or other appro<br>IGHTS. This appropriate and MPEP 13 | <ul> <li>CLOSED in this app<br/>priate communication<br/>oplication is subject to</li> </ul>         | blication. If not include will be mailed in due                 | ed<br>course. <b>THIS</b> |  |  |  |
| 1. This communication is responsive to <u>Amendment A filed 13</u>   |  |  |   |                           |  |  |  |
| ·  |  |  |   |                           |  |  |  |
| 3. The drawings filed on are accepted by the Examiner.   |  |  |   |                           |  |  |  |
| 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some* c) ☐ None of the:  |  |  |   |                           |  |  |  |
| Certified copies of the priority documents have been received.   |  |  |   |                           |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |  |   |                           |  |  |  |
| 3.  Copies of the certified copies of the priority documents have been received in this national stage application from the  |  |  |   |                           |  |  |  |
| International Bureau (PCT Rule 17.2(a)).   |  |  |   |                           |  |  |  |
| * Certified copies not received:   |  |  |   |                           |  |  |  |
| 5. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |  |  |   |                           |  |  |  |
| (a) The translation of the foreign language provisional application has been received.   |  |  |   |                           |  |  |  |
| 6. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  |  |  |   |                           |  |  |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.                                  |  |  |   |                           |  |  |  |
| 7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.   |  |  |   |                           |  |  |  |
| 8. CORRECTED DRAWINGS must be submitted.   |  |  |   |                           |  |  |  |
| <ul><li>(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li><li>1) ☐ hereto or 2) ☐ to Paper No</li></ul>   |  |  |   |                           |  |  |  |
|  |  |  |   |                           |  |  |  |
| (b) ☑ including changes required by the proposed drawing correction filed <u>26 December 2002</u> , which has been approved by the Examiner.   |  |  |   |                           |  |  |  |
| (c) 🔲 including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No  |  |  |   |                           |  |  |  |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.               |  |  |   |                           |  |  |  |
| 9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  |  |  |   |                           |  |  |  |
| Attachment(s)  |  |  |   |                           |  |  |  |
| <ul> <li>1⊠ Notice of References Cited (PTO-892)</li> <li>3☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>5☐ Information Disclosure Statements (PTO-1449), Paper No</li> <li>7☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul> | ·  | 2☐ Notice of Informal 4☐ Interview Summa 6☐ Examiner's Amen 8☑ Examiner's Stater 9☑ Other Suspension | ary (PTO-413), Paper<br>ndment/Comment<br>ment of Reasons for A | No                        |  |  |  |
|  |  |  |   |                           |  |  |  |

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## **DETAILED ACTION**

## Allowable Subject Matter

- 1. All claims are allowable. However, due to a potential interference, *ex parte* prosecution is SUSPENDED FOR A PERIOD OF 6 MONTHS from the date of this letter. Upon expiration of the period of suspension, applicant should make an inquiry as to the status of the application.
- 2. Claims 1-50 and 52-101 are allowed.
- 3. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach nor suggest a method for fabricating a laminated magnetic shield for an MR read head comprising forming a first layer of ferromagnetic material, forming on the first layer of ferromagnetic material a layer of Ruthenium, and forming on the layer of Ruthenium a second layer of ferromagnetic material, as set forth in independent claims 1 and 13. Furthermore, the above claims are not obvious over the prior art of record.

The prior art of record does not teach nor suggest a laminated magnetic shield for an MR read head comprising a first layer of ferromagnetic material, a layer of Ruthenium formed on the first layer of ferromagnetic material, and a second layer of ferromagnetic material formed on the layer of Ruthenium, as set forth in independent claims 26, 38, 52, 64, 77 and 89. Furthermore, the above claims are not obvious over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the

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issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Angel A. Castro whose telephone number is 703-308-8435.

The examiner can normally be reached on Monday through Thursday, 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William R. Korzuch can be reached on 703-305-6137. The fax phone numbers for

the organization where this application or proceeding is assigned are 703-872-9314 for regular

communications and 703-308-8435 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Angel Castro, Ph.D.

March 7, 2003

WILLIAM KORZUCH SUPERVISORY PATENT EXAMINER

**TECHNOLOGY CENTER 2600**